- (h) *Measurement procedure*. The following spectrum analyzer bandwidth settings should be used for measurement of spurious emissions:
- (1) When operating in the radiotelephony mode or the supervisory audio tone mode:
- (i) For any emission not more than 45 kHz removed from the carrier frequency: 300 Hz;
- (ii) For any emission more than 45 kHz removed from the carrier frequency: 30 kHz.
- (2) When operating in the wideband data mode or the signaling tone mode:
- (i) For any emission not more than 60 kHz removed from the carrier frequency: 300 Hz;
- (ii) For any emission more than 60 kHz removed from the carrier frequency: 30 kHz.

#### §22.919 Electronic serial numbers.

The Electronic Serial Number (ESN) is a 32 bit binary number that uniquely identifies a cellular mobile transmitter to any cellular system.

- (a) Each mobile transmitter in service must have a unique ESN.
- (b) The ESN host component must be permanently attached to a main circuit board of the mobile transmitter and the integrity of the unit's operating software must not be alterable. The ESN must be isolated from fraudulent contact and tampering. If the ESN host component does not contain other information, that component must not be removable, and its electrical connections must not be accessible. If the ESN host component contains other information, the ESN must be encoded using one or more of the following techniques:
- (1) Multiplication or division by a polynomial;
  - (2) Cyclic coding;
- (3) The spreading of ESN bits over various non-sequential memory locations.
- (c) The ESN must be factory set and must not be alterable, transferable, removable or otherwise able to be manipulated. Cellular mobile equipment must be designed such that any attempt to remove, tamper with, or change the ESN chip, its logic system, or firmware originally programmed by

the manufacturer will render the mobile transmitter inoperative.

# § 22.921 911 Call Processing Procedures; 911-Only Calling Mode.

All mobile phones manufactured after February 13, 2000, and capable of operating in an analog mode, i.e., in compliance with "Cellular System Mobile Station-Land Station Compatibility Specification" (April 1981 Ed.) Office of Engineering and Technology Bulletin No. 53, referenced in §22.933 must incorporate a special procedure for processing "9-1-1" calls. Such pro-cedure must recognize when a "9-1-1" call is made and, at such time, must override any programming in the mobile unit that determines the handling of a non-911 call and permit the call to be handled by other analog carriers. This special procedure must incorporate any one or more of the 9-1-1 call system selection processes endorsed or approved by the Commission.

[64 FR 34568, June 28, 1999]

EFFECTIVE DATE NOTE: At 64 FR 34568, June 28, 1999, \$22.921 was added. This section contains information collection and record-keeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

#### § 22.923 Cellular system configuration.

Mobile stations communicate with and through base transmitters only. Base transmitters communicate with mobile stations directly or through cellular repeaters. Auxiliary test stations may communicate with base or mobile stations for the purpose of testing equipment.

# § 22.925 Prohibition on airborne operation of cellular telephones.

Cellular telephones installed in or carried aboard airplanes, balloons or any other type of aircraft must not be operated while such aircraft are airborne (not touching the ground). When any aircraft leaves the ground, all cellular telephones on board that aircraft must be turned off. The following notice must be posted on or near each cellular telephone installed in any aircraft:

craft:
"The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules, and the violation of this

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rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations.'

### §22.927 Responsibility for mobile sta-

Mobile stations that are subscribers in good standing to a cellular system, when receiving service from that cellular system, are considered to be operating under the authorization of that cellular system. Cellular system licensees are responsible for exercising effective operational control over mobile stations receiving service through their cellular systems. Mobile stations that are subscribers in good standing to a cellular system, while receiving service from a different cellular system, are considered to be operating under the authorization of such different system. The licensee of such different system is responsible, during such temporary period, for exercising effective operational control over such mobile stations as if they were subscribers to it.

### §22.929 Application requirements for the Cellular Radiotelephone Serv-

In addition to information required by subparts B and D of this part, applications for authorization in the Cellular Radiotelephone Service contain required information as described in the instructions to the form. Site coordinates must be referenced to NAD83 and be correct to  $\pm 1$  second.

- (a) Administrative information. The following information is required either by FCC Form 601, or as an exhibit:
- (1) Location description; city; county; state; geographical coordinates correct to  $\pm$  1 second, the datum used (NAD 83), site elevation above mean sea level, proximity to adjacent market boundaries and international borders:
- (2) Antenna height to tip above ground level, the height of the center of radiation of the antenna above the average terrain, the height of the antenna center of radiation above the average elevation of the terrain along each of the 8 cardinal radials, antenna gain in the maximum lobe, the beamwidth of the maximum lobe of the an-

tenna, a polar plot of the horizontal gain pattern of the antenna, the electric field polarization of the wave emitted by the antenna when installed as proposed:

(3) The channel block requested, the maximum effective radiated power, the effective radiated power in each of the

cardinal radial directions.

(b) If the application involves a service area boundary (SAB) extension (§22.912 of this chapter), the licensee must provide a statement as described in §22.953.

(c) Maps. If the application proposes a change in the CGSA, it must include full size and reduced maps, and supporting engineering, as described in

§22.953 (a)(1) through (a)(3)

(d) Antenna Information. Upon request by an applicant, licensee, or the Commission, a cellular applicant or licensee of whom the request is made shall furnish the antenna type, model, and the name of the antenna manufacturer to the requesting party within ten (10) days of receiving written notification.

[63 FR 68951, Dec. 14, 1998, as amended at 64 FR 53241, Oct. 1, 1999]

EFFECTIVE DATE NOTES: 1. At 64 FR 68951, Dec. 14, 1998, §22.929 was revised. This section contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget.

2. At 64 FR 53241, Oct. 1, 1999, §22.929 was amended by adding paragraph (d). This paragraph contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget.

#### §22.933 Cellular system compatibility specification.

Except as provided in §22.901(d), equipment used in the Cellular Radiotelephone Service must be designed in compliance with the technical specifications for compatibility of mobile and base stations in the Cellular Radiotelephone Service contained in "Cellular System Mobile Station-Land Sta-Compatibility Specification' (April 1981 Ed.), Office of Engineering and Technology Bulletin No. 53. This bulletin is contained in Appendix D to the Report and Order in CC Docket No. 79-318, and was published in the FED-ERAL REGISTER of May 21, 1981. Copies